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PUBLIC SAFETY ELEMENT

GENERAL PLAN OF THE CITY OF CLAREMONT

City planning Claremont
Emerg. relief "
Fire prevention "

Department of Planning & Community Development
December 3, 1974

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I. Introduction. 1
II. Goals 1
III. Public Safety Issues. 1
A. Fire Hazards. 1
1. Problems. 1
2. Evaluation. 2
3. Policies. 3
4. Implementation. 4
B. Geologic Hazards. 5
1. Problems. 5
2. Evaluation. 6
3. Policies. 6
4. Implementation. 7
C. Flood Hazards 7
1. Problems. 7
2. Evaluation. 7
3. Policies. 8
4. Implementation. 9
D. Defensible Space. 9
1. Problems. 9
2. Evaluation. 9
3. Policies. 10
4. Implementation. 10
E. Emergency Preparedness. 10
1. Problems. 10
2. Evaluation. 10
3. Policies. 11
4. Implementation. 11
IV. General Policies for the Safety Element 11
V. General Implementation for the Safety Element . . 12

PUBLIC SAFETY ELEMENT

I. INTRODUCTION

The Public Safety Element is intended to introduce safety considerations in the planning process by identifying major safety hazards, specifying the level of acceptable risk, and establishing policies to reduce these hazards. It amends the existing General Plan and Safety Element. This element will recognize and define the problem areas of fire and geologic hazards as stipulated by the state guidelines and evaluate various aspects of flood control, defensible space for crime prevention, and emergency preparedness plans for the City of Claremont.

Fully cognizant that a hazard-free environment will never exist, an important initial step in this element is to determine a level of acceptable risk. Risk is defined as the possibility of loss or injury over some period of time. The Government Code stipulates acceptable risk as "the level of risk below which no specific action by local government is deemed to be necessary" whereas unacceptable risk is defined as "the level of risk above which specific action by government is deemed to be necessary to protect life and property." Although it is difficult to quantify the level of risk for geologic and flood hazards (as indicated in the Seismic Safety Element), it is the City's responsibility and desire to provide a safe environment for its residents. This Safety Element will provide policies and methods of implementation for mitigating the consequences of known hazards to acceptable risk.

II. GOALS

Goals provide a broad framework of aims and basic values which guide decision-makers in their daily activities. The purpose of the Safety Element is to accomplish the following major goals through policies and implementation:

1) Reduce the risk of injury, loss of life, and damage to property resulting from natural and man-made disasters to an acceptable level.

2) Control or prevent development in hazardous areas in order to reduce any adverse economic, environmental, and social conditions.

III. PUBLIC SAFETY ISSUES

A. Fire Hazards

1. Problems

Fire hazards are generally divided into two separate but related groups: urban fires and brush or wildland fires.

The urban portion of the City of Claremont is now developed in a fairly low-density pattern with few multi-story buildings outside of the college area. In addition, modern building and fire codes have been utilized to assure safe construction in most of the existing residential and commercial structures.

Convalescent and retirement centers present an abnormal hazard in the form of life safety requiring special provisions for early detection and warning, quick evacuation, and immediate fire suppression. These facilities are occupied by some residents with physical disabilities which would inhibit their response to a crisis and require more aid or guidance during an emergency.

Indoor assembly buildings, such as churches, schools, theaters, and certain college facilities, are also of major concern in relation to the hazard to life from fire. A large concentration of persons with the coincidence of fire could result in a panic response which ultimately may cause more injuries and losses than the initiating event. The disaster potential in assembly buildings may be increased by lack of familiarity with the surroundings and exit routes, loss of orientation, and difficulty of access for emergency equipment.

Because of Southern California's unique climatological and botanical environment, the foothills and the adjacent property have been naturally susceptible to wildfires. Any wildfire poses a threat to loss or damage of property and life. The intrusion of the human element by vehicular or recreational access into the foothill area, especially during the hot, dry summer months increases the potential for brushfires. Urbanization of the foothill area can increase fire hazards as a result of insufficient local control over development with respect to highly combustible building materials and siting of buildings, lack of water supply for fire protection, inadequate access for emergency equipment, insufficient manpower and equipment, insufficient egress for evacuation, and a lengthy response time due to slow detection measures and improper location of fire stations. Another serious concern related to brush fires is post-fire hazards such as erosion, mudslides, and floods.

2. Evaluation

The Fire Department presently has two fire stations--the department headquarters adjacent to the City Hall and the other on Base Line Rd., west of Indian Hill Blvd. Because of the structural inadequacy of the Village station, this station will be relocated in the near future. The existing facilities enable the Fire Department to respond to a fire in any developed area of the City within four minutes from receipt of alarm. Continued residential development of the foothill area will eventually require the construction of additional fire stations. Claremont is a participant in

mutual aid plans with neighboring jurisdictions which assure cooperative effort in the event of a major fire or disaster.

Because of various prevention activities by the Fire Department and a fairly informed public, Claremont's fire losses have been consistently below the regional and state averages. These prevention activities include an inspection of all commercial and industrial structures on a continuing basis and a recently-completed detailed inspection of the college buildings. In addition, the Claremont Fire Department has completed an exterior survey of all residential structures which included an evaluation of fire hazards, distribution of emergency procedures handbook and an offer to the resident for an interior safety survey of the house. Abatement of fire hazards has been initiated.

The Building Code has been amended to divide the City into three fire zones (as shown on Figure A) requiring specific fire resistive requirements for any structures within Fire Zone 4. Presently the requirements of Fire Zone 4, the cooperation with adjacent local and county fire departments, the limited urbanization, and adequate water supply and access provide sufficient means for controlling fires in the Claremont foothills. Further northerly development in the foothills will require an alternative means of access and a secondary source of water for fire protection capable of supplying the emergency needs of the area independent from the existing water system.

The Fire Department now reviews and comments on all proposed subdivisions, apartment, commercial, and industrial developments relative to emergency accessibility, the amount and type of exits, the occupant load, and water supply. In addition, the Fire Department works with Southern California Water Co. to eliminate any water deficiencies in developed areas.

3. Policies

Policies provide the necessary link between the establishment of goals and their realization. They provide direction for mitigating existing and future fire hazards.

Areas of significant risk which cannot physically or economically be properly protected from an unacceptable level of safety hazard should not be areas where intensive use or relatively high densities of population are permitted. The City therefore shall RESTRICT WIDESPEAD URBAN DEVELOPMENT IN IDENTIFIABLE HAZARDOUS AREAS WITHOUT ADEQUATE PROVISIONS FOR FIRE SAFETY.

Fire is an especially hazardous possibility in the hillside areas due to the critical dryness of California summers. Improper development techniques and standards may result

in hazardous conditions far above the minimum level of acceptable risk. The City, therefore, shall 1) DEVELOP STRINGENT SITE CRITERIA SUCH AS AMOUNT OF BRUSH CLEARANCE FOR ANY CONSTRUCTION IN AREAS WITH SPECIFIC FIRE PROBLEMS; 2) RESTRICT VEHICULAR AND RECREATIONAL USE OF THE FOOTHILL AREA DURING CRITICALLY HAZARDOUS PERIODS; 3) ESTABLISH MINIMUM STANDARDS FOR WATER SUPPLY AND ACCESS FOR FIRE-FIGHTING EQUIPMENT.

Fire hazards can be reduced by effective legislation and enforcement. The City therefore shall 1) CONTINUE TO EVALUATE AND STRENGTHEN EXISTING FIRE CODES AND ORDINANCES PERTAINING TO FIRE HAZARDS, PARTICULARLY WITH REGARD TO LARGE STRUCTURES; 2) CONTINUE TO REDUCE FIRE HAZARDS ASSOCIATED WITH EXISTING BUILDINGS BY INSPECTION AND CODE ENFORCEMENT.

Technical advances in the area of fire suppression can provide additional safety measures to the public. The City shall therefore 1) ENCOURAGE CONTINUED RESEARCH IN THE FIELD OF FIRE SAFETY AND IMPLEMENT NEW TECHNOLOGIES IN THE SUPPRESSION AND PREVENTION OF FIRES, AND 2) INCREASE COOPERATION AND THE SHARING OF INFORMATION AMONG THE VARIOUS JURISDICTIONS AND AGENCIES INVOLVED IN FIRE PROTECTION.

4. Implementation

The critical factor in any planning effort is the effectuation of specific programs to achieve adopted goals and policies. The following programs or activities will result in a significant capability in reducing fire hazards and implementing the specified policies of the Public Safety Element:

a. The City shall develop a Master Plan for fire protection which includes methods for hazard reduction, optimal fire station location based upon response time and the provision for adequate fire suppression in order to maximize the fire protection capability for the entire community.

b. The City shall relocate the Village fire station to its optimal location with respect to response time, critical fire areas and adjacent fire facilities.

c. The City shall continue to disseminate information relating to fire preventive measures and citizen response to emergency situations with the understanding that an informed public can greatly aid in the reduction of fire losses.

d. The City shall require a secondary means of emergency ingress and egress for all developments and shall limit the length of all cul-de-sacs. To ensure the safety of the foothill residents, the City shall require an additional means of access and a secondary source of water supply for fire-fighting purposes prior to any additional development north of the existing hillside development.

e. The City shall continue its identification and inspection of all buildings and vacant lands which are in violation of the Claremont Fire Code and other City Codes and shall require the prompt abatement of identified fire hazards in order to ensure that fire safety is maintained within Code requirements.

f. The City shall continue to review and amend, if necessary, Building and Fire Codes with respect to safety considerations including

1) Fire restrictive exterior with emphasis on roofing and siding.

2) Automatic fire control and safety systems for high-rise buildings and other buildings whose size makes control of fire difficult.

3) The degree of brush clearance required.

4) Siting of buildings in Fire Zone 4 to insure no building being in the direct path of excessive heat rising by convection from a downhill fire.

B. Geologic Related

1. Problems

The predominant non-seismic geologic hazards in the Claremont planning area are slope instability and erosion, both of which are more predominant in the foothills area. Slope instability usually results from a combination of surface and subsurface waters, the geologic structure and rock types of the area, and the topography. Slope failures such as landslides, rockslides and mudflows are much more likely to occur in areas with moderate to steep slopes.

Land erosion is the process by which soil or rock materials are loosened and dissolved and moved from place to place by action of water or wind. Erosion activity is usually accelerated by the steepness of the slopes. Although the losses due to erosion activity are difficult to separate from those associated with landslides and flooding, the major costs of erosion activity are in removing sediment from public and private drainage systems.

A geotechnical report prepared in 1973 for consideration during the development of the Seismic Safety Element indicated the existence of landslide and debris flows in the Claremont foothills which are subject to possible major failures. Their probability of occurrence is greatly increased during strong earthquake shaking, especially if the ground is water soaked. A landslide history map prepared by R. Streitz in

1965 (Preliminary Geologic Map Glendora Quad 1/4 and Mt. Baldy SW 1/4) indicated landslide potentials in the Claremont foothills. These potentials for landslide and erosion areas are often increased by inadequate site treatment, such as poor grading and lack of soil stabilization.

2. Current Evaluation

Claremont's primary concerns relative to geologic hazards are in the foothills and along earthquake fault traces. The Seismic Safety Element established a Landslide Hazard Management Area which incorporates all of the hillside area as designated on the geotechnical map and requires "all developments to submit a combination of design analysis and soils reports, and a review of potential landslide hazards that might exist if the development proceeds to the City for review and approval prior to processing other applications." Prior to issuing any building permit, the City must determine that an undue hazard would not result from construction on the subject property.

The Urban Geology Master Plan by the California Division of Mines and Geology indicates that over 90 percent of losses due to landslide and about 70 percent of the losses due to erosion in urban areas could be eliminated by a combination of measures involving geologic investigations, engineering practices, and effective enforcement of grading ordinances. The City of Claremont has sufficient regulatory controls within the Land Use and Development Code and the Building Code--specifically, the hillside development section, grading review by Staff and the Planning Commission and Ch. 70 of the Uniform Building Code--to reduce landslide and erosion potential resulting from future urbanization of the foothills. On-site inspection during various stages of development by qualified grading inspectors, however, is required to ensure enforcement of approved grading plans.

3. Policies

Areas of significant geologic risk, such as landslide areas or fault zones, which cannot be properly protected from an unacceptable level of risk should not be areas where intensive use or relatively high densities of population are permitted. The City therefore shall 1) RESTRICT WIDESPREAD URBANIZATION IN IDENTIFIABLE HAZARDOUS AREAS AND 2) DEVELOP STRINGENT SITE CRITERIA FOR ANY CONSTRUCTION IN AREAS WITH SPECIFIC GEOLOGIC PROBLEMS.

Losses resulting from geologic hazards can be reduced by effective legislation and enforcement. The City therefore shall 1) SUPPORT LEGISLATION THAT WILL ALLEVIATE POTENTIAL GEOLOGIC DISASTERS AND 2) ENCOURAGE IMPROVED GEOLOGIC HAZARD INSURANCE PROGRAMS.

Technical advances in the area of reducing geologic risk, especially with respect to building codes, can provide additional safety measures to the public. The City shall therefore ENCOURAGE CONTINUED RESEARCH IN THE FIELD OF REDUCING GEOLOGIC HAZARDS AND INCORPORATE PERTINENT BUILDING CODE RESTRICTIONS WITHIN THE UNIFORM BUILDING CODE OF CLAREMONT.

4. Implementation

The following programs or activities will result in a significant capability in reducing hazards and implementing the specified policies of the Public Safety Element:

a. The City shall review and amend the Land Use and Development Code, especially the Hillside Development, Grading, and Subdivision regulations, with regard to providing additional safety considerations relative to the mitigation of geologic hazards.

b. The City shall require soils engineering/geological reports and EIR's in any geologically-hazardous areas in the hillsides and the alleviation of any geologic hazards shall be a major concern during City review.

C. Flood Hazards

1. Problems

In addition to geologic concerns, hazardous floods are a major concern of the foothills areas and their urbanization. Water runoff is affected by quality and stability of the slope, the type and amount of vegetation, steepness of slope, fire history, the amount of area removed from percolation, and the type and amount of earth movement necessary in construction. However, floods due to heavy rainfall without the presence of urbanization have been part of the Claremont scene, as witness the major floods in 1914, 1916, and 1938.

2. Current Evaluation

Flood control measures typically involve structural and non-structural approaches. Structural measures include development of flood-water storage systems such as dams, reservoirs, and basins. The San Antonio Dam and Channel, Thompson Creek Dam and Channel, and the Live Oak Dam and Channel provide adequate protection from flood hazards. Non-structural measures include zoning and subdivision regulations, building code requirements and the evacuation of flood areas.

The City of Claremont has had a Storm Drain Master Plan since 1971 (revised in 1974) which denotes existing and proposed drainage facility plans. In addition, the City Council recently established a requirement for the payment of drainage fees

by the developer for any new developments in the community, which will provide the means for implementing the Storm Drain Master Plan. In align with this ordinance, a drainage study for the Claremont planning area was prepared which denoted local drainage areas and established fees on a per-acre basis to be collected from developers to help defray the cost of future drainage facilities.

The natural drainage areas in the Claremont foothills are presently illustrated on the General Plan Map which combines watershed protection with a definable and usable open space network. The Slate Subdivision Map Act grants the City of Claremont the right to refuse approval of a subdivision threatened by flooding (Sec. 1155 1.5, Business and Professions Code).

Claremont has recently been granted coverage under the Federal Flood Insurance Program. It should be noted that that program has been revised to discourage any rebuilding in flood-prone areas.

3. Policies

Low land flooding emanating from hillside areas because of improper grading may increase danger far above the minimum level of acceptable risk. The City therefore shall 1) DEVELOP STRINGENT SITE CRITERIA FOR ANY CONSTRUCTION IN FLOOD-PRONE AREAS AND PROHIBIT CONSTRUCTION IF THESE CRITERIA ARE NOT MET; 2) PROTECT WATERSHED LANDS TO PERMIT NATURAL PERCOLATION; 3) ENCOURAGE MAINTENANCE AND MONITORING OF FLOOD CONTROL FACILITIES; AND 4) SUPPORT AND ENCOURAGE FLOOD HAZARD INSURANCE PROGRAMS.

Careful development and establishment of standards can reduce flood-losses by denoting concerns early in the planning process. The City therefore shall ESTABLISH AND ENFORCE GRADING STANDARDS AND CRITERIA THAT REDUCE UNACCEPTABLE LEVELS OF FLOOD RISK.

4. Implementation

The following programs or activities will result in a significant capability in reducing flood hazards and implementing the specified policies of the Public Safety Element:

a. The City should review and amend the Land Use and Development Code, especially the Hillside and Development, Grading, and Subdivision sections with regard to providing additional mechanisms for assuring proper grading and retention of natural drainage areas.

b. The City shall require soils reports and EIR's in any flood prone areas.

D. Defensible Space or Use of Physical Planning to Reduce Incidence of Crime

1. Issues

The rising crime rate and the fear for personal safety is an important concern for many of today's residents. With the realization that crime prevention is a varied and multi-disciplinary problem, one aspect that has been given only token consideration in crime reduction is the implementation of crime preventive measures in site planning and structural design of residential and commercial developments. The utilization of the proprietary concerns of the eventual occupants in the preliminary design of developments in order to inhibit crime has been generally neglected. Subdivision design, the type and location of parking facilities, the location of recreational facilities, the proximity to emergency facilities, and the amount of street illumination are important considerations for the prevention of urban crime.

2. Current Evaluation

SCAG's publication, Handbook of Crime Prevention Bulletins, specifies many of the concerns relating to physical design that inhibit crime. Claremont's Police Department was one of the first in the Southern California region to be involved in this study and careful consideration is given to many of these specific concerns early in the planning process. Presently the Police Department reviews all building plans and proposed developments with respect to accessibility, location of cul-de-sacs and recreational areas, type of parking, and amount of illumination, both on-and-off-site. In addition, revisions to the Land Use and Development Code and Building Code, such as requiring garages rather than carports or open parking and stipulating lock-pin devices for sliding doors would also increase the amount of built-in safety. Citizen awareness and more community involvement would be a significant deterrent to urban crime and such awareness is often encouraged by various community programs initiated by the Police Department.

3. Policies

Early consideration given to the physical design of developments with respect to crime prevention is an important deterrent to crime. Therefore the City shall PROMOTE PHYSICAL DESIGN IN DEVELOPMENTS WHICH UTILIZE METHODS OF DEFENSIBLE SPACE FOR INHIBITING CRIME.

4. Implementation

The following activities will result in a significant capability in reducing crime and providing a safer environment for the residents of Claremont:

a. The City shall review and, if necessary, amend the Building and Land Use and Development Codes with respect to crime preventive considerations including better locking features for doors and windows and enclosed garages rather than carports.

b. The City shall incorporate the concepts of defensible space in the review of private and public developments.

E. Emergency Preparedness

1. Issues

Regardless of the magnitude of safety controls, there can never be a hazard free environment. Natural and man-made disasters can and will occur. A main factor in reducing the loss of life or property is a current disaster plan. Such a disaster or emergency plan requires the immediate cooperation of many private and public resources.

The functions of such an Emergency Plan are to anticipate the different wartime and peacetime emergencies which may conceivably affect the community, to organize the City's staff by assigning specific emergency responsibilities to each department, and to establish a coordinative recovery effort with neighboring cities and County jurisdiction.

2. Current Evaluation

The City adopted an Emergency Plan in October 1972 which was recently updated and approved by the State. An important aspect of this Emergency Plan is the communication systems. With the recent completion of the communications center in the new police building, the City now has a centrally-located emergency communications headquarters. The City has also coordinated with the county-wide Disaster Route Priority Plan. This plan identified available routes for detours and a priority system for reestablishment of service on surface streets which would be interfaced with the State's alternate route plans for freeways and State highways. This program would establish procedures to assure coordination of efforts of adjoining jurisdictions in reconstructing facilities and in minimizing the response time to the emergency areas, regardless of jurisdictional boundaries. The major streets in Claremont that are relative to this Disaster Route Plan are shown in Figure _.

3. Policies

In order to reduce the amount of loss of life and property as a consequence of a major disaster, the City of Claremont shall

a. Review and explore disaster preparedness and emergency response capabilities.

b. Support legislation that will alleviate potential disasters.

c. Increase cooperation and coordination among the various jurisdictions and agencies involved in disaster protection.

4. Implementation

The following activities will result in a more efficient response to major emergencies:

The City shall require a secondary means of emergency ingress and egress for all urbanized areas.

The City shall evaluate its Emergency Preparedness Plans annually with respect to existing and potential hazards and cooperate with adjacent communities with respect to Disaster Routes, Planning and Communication Systems during disasters (see Seismic Element).

IV. GENERAL POLICIES FOR THE SAFETY ELEMENT

In addition to the policies specified in the individual sections, there are certain policies which in their scope and magnitude pertain to each problem issue and which would result in a safer environment for the residents of Claremont.

Public knowledge and attitudes on the various natural and man-made hazards is an important aspect in reducing the ultimate losses to life and property. The City therefore SHALL EXPAND PUBLIC EDUCATIONAL AND INFORMATIONAL PROGRAMS INTO ALL ASPECTS OF PUBLIC SAFETY.

Minimum standards should be determined for natural and man-made hazardous areas below which a reasonable level of public safety cannot be assured. The City therefore SHALL ESTABLISH STANDARDS AND CRITERIA THAT REDUCE LEVELS OF PUBLIC RISK TO AN ACCEPTABLE LEVEL AND REQUIRE ALL NEW DEVELOPMENT AND SELECTED EXISTING DEVELOPMENT TO COMPLY WITH THESE STANDARDS.

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V. GENERAL IMPLEMENTATION FOR THE SAFETY ELEMENT

Certain implementation programs are appropriate for all the problem issues--fire, geologic, flood, emergency preparedness, and defensible space--to provide the capabilities of reducing the severity of hazards:

The City shall disseminate information relating to all known hazards and shall specify methods of mitigating or reducing these hazards through appropriate means, including workshops by various City Departments at schools, clubs, and other organizations.

The City shall annually review--and amend, if necessary--its General Plan, especially the Land Use and Circulation Elements with regard to urban development in hazardous areas.

The City shall expand Departmental Review to require Group Review--including Police, Fire, Public Works, Parks and Planning--of any proposed developments, both private and public, in hazardous areas to ensure that all safety concerns are denoted early in the planning stage.

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